

### **Quantitative Usage Analysis for Triclopyr**

Case Number: 2710

PC Code: 116001-2-4

Date: March 20, 2001

Analyst: Frank Hernandez

Based on available pesticide survey usage information for the years of 1990 through 1999, total annual domestic usage of triclopyr averaged approximately six hundred thousand pounds of active ingredient (a.i.) on about one million acres treated. Triclopyr is a herbicide with its largest markets in terms of total pounds of active ingredient allocated to woodland (21%), rice (16%), rights-of-way (15%), other hay (15%), railroads (8%), households (7%), and pasture (6%). Most of the usage is in AR, FL, GA, KS, LA, MS, TX, VA, and OK

Crops with a relatively high percentage of the total U.S. acreage treated include railroads (9%), rice (6%), and rights-of-way (2%).

Crops with less than 1 percent of the crop treated include alfalfa, almonds, cotton, grapefruit, peanuts, potatoes, raspberries, soybeans, and wheat.

| Site                  | Acres Grown (000) | Acres Treated (000) |         | % of Crop Treated |         | LB AI Applied (000) |         | Average Application Rate |            |               | States of Most Usage                 |
|-----------------------|-------------------|---------------------|---------|-------------------|---------|---------------------|---------|--------------------------|------------|---------------|--------------------------------------|
|                       |                   | Wtd Avg             | Est Max | Wtd Avg           | Est Max | Wtd Avg             | Est Max | lb ai/ acre/yr           | #appl / yr | lb ai/ A/appl | (% of total lb ai used on this site) |
| Alfalfa               | 23,665            | 2                   | 7       | 0.0               | 0.0     | 1                   | 2       | 0.3                      | 1.0        | 0.3           | OK IL 84%                            |
| Almonds               | 489               | 0                   | 1       | 0.0               | 0.2     | 0                   | 3       | 3.0                      | 3.0        | 1.0           | CA 100%                              |
| Apples                | 520               | 1                   | 3       | 0.2               | 0.6     | 1                   | 5       | 1.1                      | 1.1        | 1.0           | PA VA NH 83%                         |
| Blackberries          | 5                 | 0                   | 0       | 0.2               | 4.3     | 0                   | 0       | 0.1                      | 1.0        | 0.1           | OR 100%                              |
| Blueberries           | 59                | 0                   | 2       | 0.1               | 3.2     | 0                   | 0       | 0.1                      | 1.0        | 0.1           | OR 100%                              |
| Cherries              | 114               | 0                   | 1       | 0.1               | 0.8     | 0                   | 0       | 0.0                      | 1.0        | 0.0           | OR 100%                              |
| Corn                  | 43,359            | 27                  | 109     | 0.1               | 0.3     | 3                   | 8       | 0.1                      | 1.0        | 0.1           | TX IN IA KY 82%                      |
| Cotton                | 13,188            | 1                   | 3       | 0.0               | 0.0     | 0                   | 1       | 0.2                      | 1.0        | 0.2           | TX 100%                              |
| CRP Acres-long Term   | 34,757            | 37                  | 101     | 0.1               | 0.3     | 6                   | 13      | 0.2                      | 1.0        | 0.2           | KS FL GA MI 88%                      |
| Grapefruit            | 189               | 0                   | 0       | 0.0               | 0.0     | 0                   | 0       | 0.4                      | 1.3        | 0.3           | FL 100%                              |
| Grapes                | 615               | 0                   | 2       | 0.1               | 0.3     | 1                   | 2       | 1.3                      | 1.0        | 1.3           | WA PA 84%                            |
| Hay, Other            | 25,983            | 130                 | 241     | 0.5               | 0.9     | 87                  | 212     | 0.7                      | 1.0        | 0.7           | TX VA 80%                            |
| Household or Domestic | 32,700            | 75                  | 115     | 0.2               | 0.4     | 40                  | 65      | 0.5                      | 1.0        | 0.5           |                                      |
| Idle Cropland         | 7,461             | 3                   | 10      | 0.0               | 0.1     | 1                   | 5       | 0.5                      | 1.0        | 0.5           | TN IN WA CA 83%                      |

| Site                | Acres Grown (000) | Acres Treated (000) |         | % of Crop Treated |         | LB AI Applied (000) |         | Average Application Rate |            |               | States of Most Usage                 |
|---------------------|-------------------|---------------------|---------|-------------------|---------|---------------------|---------|--------------------------|------------|---------------|--------------------------------------|
|                     |                   | Wtd Avg             | Est Max | Wtd Avg           | Est Max | Wtd Avg             | Est Max | lb ai/ acre/yr           | #appl / yr | lb ai/ A/appl | (% of total lb ai used on this site) |
| Lots/Farmsteads/etc | 23,987            | 68                  | 103     | 0.3               | 0.4     | 33                  | 65      | 0.5                      | 1.2        | 0.4           | TX OR CA AR IN MS 67%                |
| Nut Trees           | 712               | 2                   | 7       | 0.3               | 1.0     | 1                   | 5       | 0.6                      | 1.0        | 0.6           | CA OR 94%                            |
| Oats/Rye            | 5,944             | 5                   | 25      | 0.1               | 0.4     | 3                   | 12      | 0.5                      | 1.0        | 0.5           | AR MS 95%                            |
| Oranges             | 927               | 1                   | 6       | 0.1               | 0.7     | 1                   | 4       | 0.7                      | 1.0        | 0.7           | FL 100%                              |
| Other Crops         | 2,515             | 0                   | 10      | 0.0               | 0.4     | 0                   | 102     | 1.0                      | 1.0        | 1.0           | NJ OR 100%                           |
| Pasture             | 86,960            | 68                  | 117     | 0.1               | 0.1     | 34                  | 88      | 0.5                      | 1.0        | 0.5           | KS TX WI FL 84%                      |
| Peaches             | 259               | 0                   | 1       | 0.1               | 0.5     | 0                   | 0       | 0.0                      | 1.0        | 0.0           | PA 100%                              |
| Peanuts             | 1,508             | 0                   | 1       | 0.0               | 0.0     | 0                   | 0       | 0.0                      | 1.0        | 0.0           | GA 100%                              |
| Pears               | 74                | 1                   | 3       | 0.8               | 3.6     | 0                   | 1       | 0.3                      | 1.0        | 0.3           | OR 100%                              |
| Pecans              | 452               | 0                   | 2       | 0.1               | 0.4     | 0                   | 0       | 0.0                      | 1.0        | 0.0           | OK 100%                              |
| Plums & Prunes      | 140               | 0                   | 1       | 0.2               | 0.4     | 0                   | 1       | 1.0                      | 1.0        | 1.0           | CA OR 100%                           |
| Potatoes            | 1,421             | 0                   | 10      | 0.0               | 0.7     | 0                   | 57      | 1.0                      | 1.0        | 1.0           | KY 100%                              |
| Railroads           | 1,060             | 90                  | 165     | 8.5               | 15.6    | 45                  | 80      | 0.5                      | 1.0        | 0.5           | TX OR MS IN PA IL 55%                |
| Raspberries         | 13                | 0                   | 1       | 0.0               | 4.1     | 0                   | 1       | 1.0                      | 1.0        | 1.0           | WA 100%                              |
| Rice                | 3,175             | 190                 | 352     | 6.0               | 11.1    | 90                  | 123     | 0.5                      | 1.0        | 0.5           | AR LA MS 90%                         |

| Site            | Acres Grown (000) | Acres Treated (000) |         | % of Crop Treated |         | LB AI Applied (000) |         | Average Application Rate |            |               | States of Most Usage                 |
|-----------------|-------------------|---------------------|---------|-------------------|---------|---------------------|---------|--------------------------|------------|---------------|--------------------------------------|
|                 |                   | Wtd Avg             | Est Max | Wtd Avg           | Est Max | Wtd Avg             | Est Max | lb ai/ acre/yr           | #appl / yr | lb ai/ A/appl | (% of total lb ai used on this site) |
| Rights-of-Way   | 3,200             | 75                  | 100     | 2.3               | 3.1     | 85                  | 125     | 1.1                      | 1.0        | 1.1           | TX WV GA VA OK KS 68%                |
| Setaside Acres  | 21,802            | 8                   | 15      | 0.0               | 0.1     | 2                   | 5       | 0.3                      | 1.0        | 0.3           | TX OH 83%                            |
| Sod             | 152               | 1                   | 7       | 0.5               | 4.9     | 0                   | 5       | 0.7                      | 1.0        | 0.7           | WI 100%                              |
| Soybeans        | 66,303            | 10                  | 42      | 0.0               | 0.1     | 2                   | 12      | 0.2                      | 1.0        | 0.2           | MS AR 91%                            |
| Summer Fallow   | 29,040            | 3                   | 10      | 0.0               | 0.0     | 1                   | 166     | 0.3                      | 1.0        | 0.3           | MS OH FL 82%                         |
| Vegetables, All | 3,899             | 1                   | 10      | 0.0               | 0.3     | 1                   | 86      | 1.1                      | 1.0        | 1.1           | WA WI MI NY TN 90%                   |
| Walnuts         | 215               | 2                   | 7       | 0.7               | 3.1     | 0                   | 3       | 0.3                      | 1.0        | 0.3           | OR 100%                              |
| Wheat, Winter   | 43,721            | 8                   | 45      | 0.0               | 0.1     | 2                   | 8       | 0.2                      | 1.0        | 0.2           | GA MD 93%                            |
| Woodland        | 62,167            | 150                 | 253     | 0.2               | 0.4     | 120                 | 324     | 0.8                      | 1.2        | 0.6           | FL OR TX OK WA 83%                   |
| Total           |                   | 959                 | 1,423   |                   |         | 562                 | 1,074   |                          |            |               |                                      |

### **COLUMN HEADINGS**

Wtd Avg = Weighted average--the most recent years and more reliable data are weighted more heavily. Est Max = Estimated maximum, which is estimated from available data. Average application rates are calculated from the weighted averages.

### **NOTES ON TABLE DATA**

Usage data primarily covers 1990 - 1999. Calculations of the above numbers are displayed as rounded to the nearest 1,000 for acres treated or lb. a.i. (therefore 0 = < 500); and to one decimal percentage point for % of crop treated.

**Other/Crop Groups:** Other Crops include ornamentals, popcorn, rapeseed/canola, and safflower.

**SOURCES:** EPA data, USDA, and National Center for Food and Agricultural Policy.